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REMARKS

Reconsideration and allowance of this application are respectfully requested in light of the above amendments and the following remarks.

Claims 1-10, 13-18, 20, 21, and 23-27 have been amended, and claims 11, 12, 19, and 22 have been cancelled. Support for the amendments is provided at least in the original claims. Claim 27 has been amended to overcome the objection thereto.

Claims 1-22 stand rejected, under 35 USC §103(a), as being unpatentable over Walton et al. (US 2003/0081538) in view of Arai et al. (USPN 6,456,607). Claims 23-27 stand rejected, under 35 USC §103(a), as being unpatentable over Walton in view of Arai and Hwang (US 2002/0060997). To the extent these rejections may be deemed applicable to the presently amended claims, the Applicant respectfully traverses based on the points set forth below.

Claim 1 now recites features of original claim 12 and defines an OFDM-CDMA transmitting apparatus that multiplexes a plurality of symbols spread according to different spreading ratios.

The Office Action does not cite Arai for suggesting this feature but proposes that Walton discloses the feature in the

abstract and paragraphs 29 and 108 (see Office Action page 7, third paragraph).

However, by contrast to the proposal in the Office Action, Walton discloses changing a transmission data rate by changing a spreading factor (see Walton's abstract, lines 8-10, paragraph [0109], lines 1-2, paragraph [0110], lines 1-2, and paragraph [0111], lines 1-3). Walton also discloses that data of different users that is multiplexed into an OFDM-CDMA signal may be spread by using different spreading codes (see paragraph [0029], lines 4-5).

However, Walton does not disclose or suggest that the different spreading codes assigned to the data of the different users may have different ratios (i.e. spreading factors) within a single OFDM-CDMA signal. Instead, Walton discloses that the spreading factor is identical for each user's data within a single OFDM-CDMA signal, although the spreading factor may change for a subsequent OFDM-CDMA signal.

More specifically, Walton discloses that a single symbol may be spread by a spreading factor of  $M$  and multiplexed onto  $M$  sub-bands of an OFDM-CDMA signal for transmission at a data rate of 9.6 Kbps (see paragraph [0010], lines 8-11). Walton further discloses that two symbols may each be spread by a spreading factor of  $M/2$  and multiplexed onto  $M/2$  sub-bands (i.e.,  $M$  sub-

bands in total for the two symbols) of an OFDM-CDMA signal for transmission at a data rate of 19.2 Kbps (see paragraph [0010], lines 11-15). Thus, as the data rate increases, the spreading factor is reduced "proportionately" to accommodate the higher data rate (paragraph [0111], lines 1-3).

In summary, Walton discloses that each symbol multiplexed within a single OFDM-CDMA signal is spread with an identical spreading factor. Thus, Walton does not disclose the claimed feature of multiplexing, onto subcarriers of an OFDM signal, a plurality of symbols spread according to different spreading ratios.

Accordingly, the Applicant submits that Walton and Arai, considered individually or in combination, do not render obvious the subject matter now defined by claim 1. Independent claim 21 similarly recites the above-mentioned feature distinguishing apparatus claim 1 from the applied references, but with respect to a method. Therefore, the rejections applied to claims 23-27 are obviated and allowance of claims 1 and 21 and all claims dependent therefrom is warranted.

In view of the above, it is submitted that this application is in condition for allowance and a notice to that effect is respectfully solicited.

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If any issues remain which may best be resolved through a telephone communication, the Examiner is requested to telephone the undersigned at the local Washington, D.C. telephone number listed below.

Respectfully submitted,



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